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FIG.1

AUTHOR: TAMINORI TOMITA
NATIONALITY: JAPAN
BORN IN: 1969
DIED IN:

[ABSTRACT]

[OBJECT]
TO PROVIDE A TECHNOLOGY WHICH IS CAPABLE OF PREVENTING UNFAIR
USE OF DIGITAL CONTENTS

[SOLVING MEANS]
A DIGITAL CONTENTS UNFAIR USE PREVENTING METHOD WHICH PREVENTS
UNFAIR USE OF DIGITAL CONTENTS COMPRISING THE STEPS OF:
PRESETTING INFORMATION ON THE STATE TO CONTROL THE PLAYBACK
PROCESSING OF THE DIGITAL CONTENTS IN INTEREST; AND
DEPENDING UPON THE VALUE OF SAID PRESET STATE INFORMATION,
CONTROLLING THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS
IN INTEREST

SIGNATORY INFORMATION: CN=Tomita Taminori, O=Hitachi, C=JP
VERIFICATION RESULT: OK

101

102

FIG.2

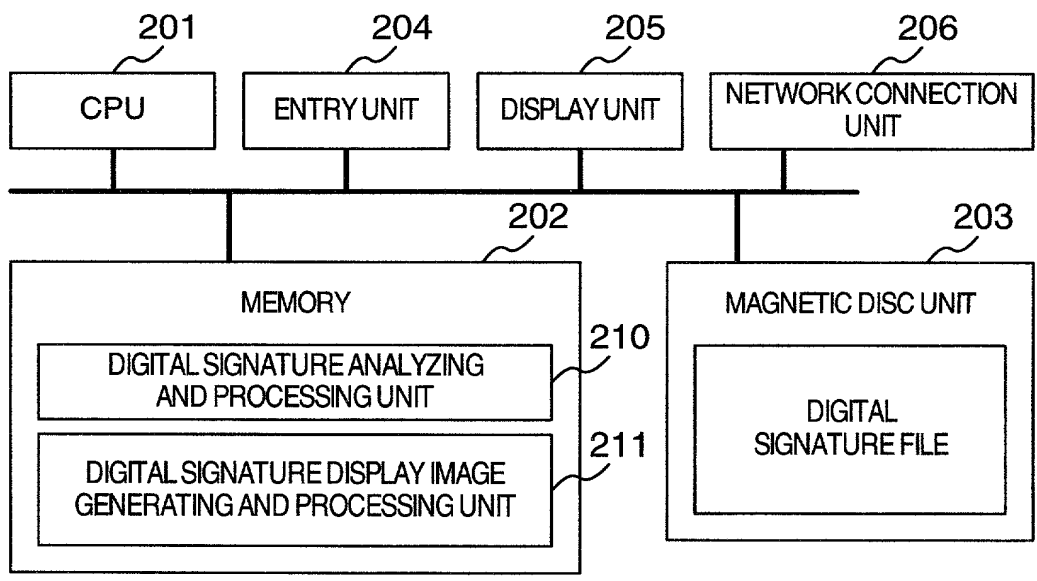


FIG.3

DIGITAL SIGNATURE ANALYZING AND PROCESSING UNIT 210

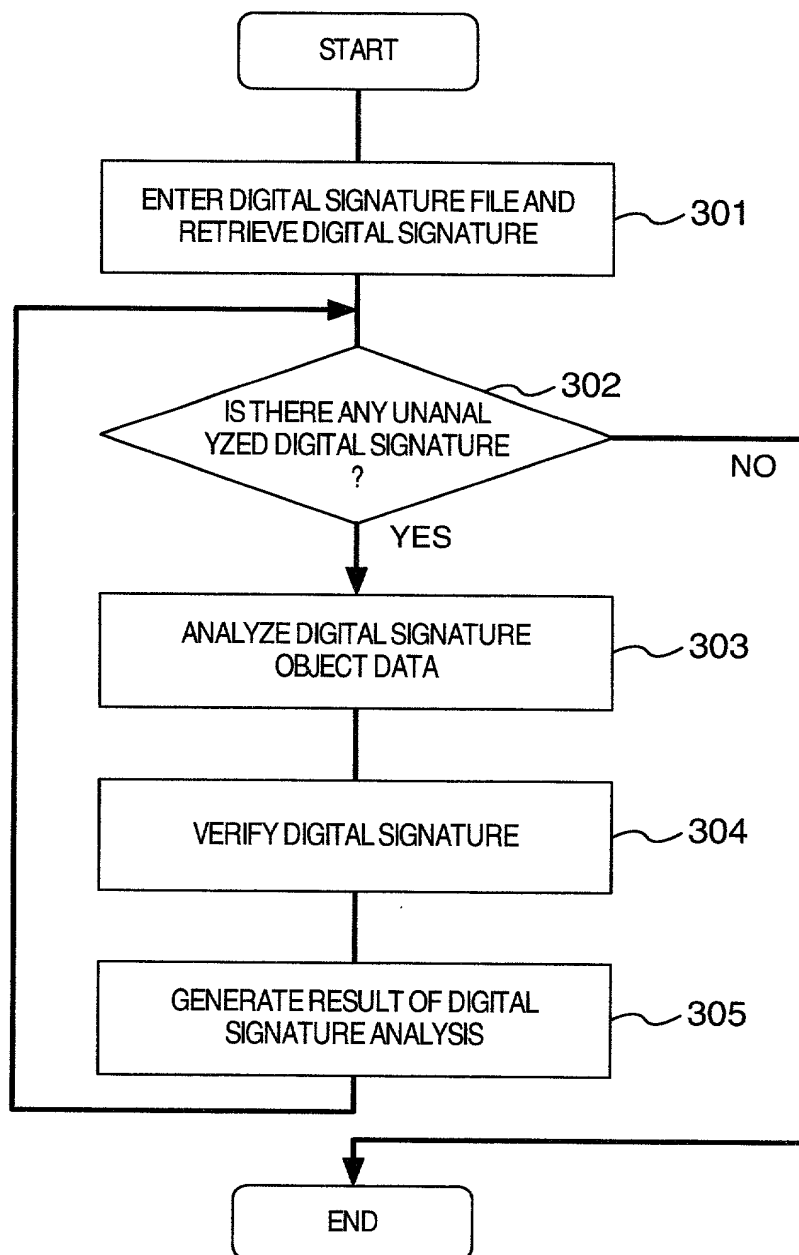


FIG.4

IMAGE GENERATING AND PROCESSING UNIT 211

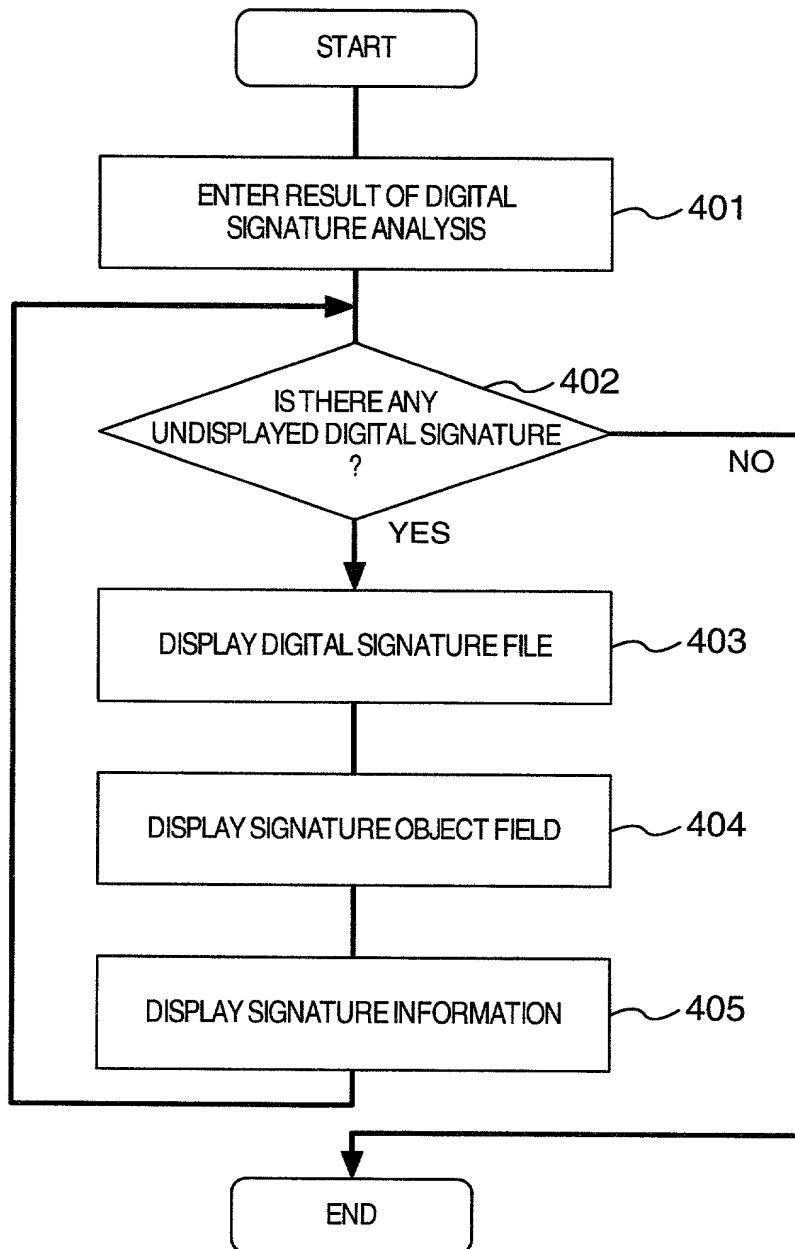


FIG.5

dsign.xml

```

001 <document>
002   <Signature>
003     <SignedInfo>
004       <SignatureMethod Algorithm="http:// . . ."/>
005       <Reference IDREF="ALL">
006         <DigestMethod Algorithm="http:// . . ."/>
007         <DigestValue Encoding=" . . . ">
008           WfKRfGWiAni9bY9k/sXgBFt4ge4=
009         </DigestValue>
010       </Reference>
011     </SignedInfo>
012     <SignatureValue>
013       MCwCFB0M62xrxMGm7qfBt8R+Zv4YulAhRvQHIDkgAdtnDQIOYog07srWhaiA==
014     </SignatureValue>
015     <KeyInfo>
016       <X509Date>
017         <X509Name> CN=Tomita Taminori, O=Hitachi, C=JP </X509Name>
018         <X509Certificate>
019           tLKJqNhJznnUvkqZQ2ce+6slauJ8cw7yALDZJhzFlnHzALBgoqhkJooAQDBQADLwAwLAIUZUJD>
020         </X509Certificate>
021       </X509Date>
022     </keyInfo>
023   </Signature>
024   <Object ID="ALL">
025     <Object Id="author">
026       <author>
027         <last-name> Tomita </last-name>
028         <first-name> Taminori </first-name>
029         <nationality> Japan </nationality>
030         <year-of-birth> 1969 </year-of-birth>
031         <year-of-death> ---- </year-of-death>
032       </author>
033     </Object>
034     <Object Id="title">
035       <title> [ABSTRACT] </title>
036       <lines>
037         <line> [OBJECT]
038         <line> TO PROVIDE A TECHNOLOGY WHICH IS CAPABLE OF PREVENTING UNFAIR
          USE OF DIGITAL CONTENTS </line>
039         <line> [SOLVING MEANS] </line>
040         <line> A DIGITAL CONTENTS UNFAIR USE PREVENTING METHOD WHICH PREVENTS
          UNFAIR USE OF DIGITAL CONTENTS COMPRISING THE STEPS OF: </line>
041         <line> PRESETTING INFORMATION ON THE STATE TO CONTROL THE PLAYBACK
          PROCESSING OF THE DIGITAL CONTENTS IN INTEREST; AND </line>
042         <line> DEPENDING UPON THE VALUE OF SAID PRESET STATE INFORMATION, </line>
043         <line> CONTROLLING THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS IN
          INTEREST </line>
044       </lines>
045     </Object>
046   </Object>
047 </document>

```

FIG.6

#	DIGITAL SIGNATURE FILE NAME	SIGNATORY INFORMATION	DIGITAL SIGNATURE OBJECT DATA FILE NAME	SIGNATURE OBJECT DATA IDENTIFIER	SIGNATURE VERIFICATION RESULT
1	dsign.xml	CN=Tomita Taminori, O=Hitachi, C=JP	dsign.xml	ALL	OK

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FIG.7

AUTHOR: TAMINORI TOMITA
NATIONALITY: JAPAN
BORN IN: 1969
DIED IN:

[ABSTRACT]

[OBJECT]

TO PROVIDE A TECHNOLOGY WHICH IS CAPABLE OF PREVENTING UNFAIR
USE OF DIGITAL CONTENTS

[SOLVING MEANS]

A DIGITAL CONTENTS UNFAIR USE PREVENTING METHOD WHICH PREVENTS
UNFAIR USE OF DIGITAL CONTENTS COMPRISING THE STEPS OF:
PRESETTING INFORMATION ON THE STATE TO CONTROL THE PLAYBACK
PROCESSING OF THE DIGITAL CONTENTS IN INTEREST; AND
DEPENDING UPON THE VALUE OF SAID PRESET STATE INFORMATION,
CONTROLLING THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS
IN INTEREST

FIG.8

AUTHOR: TAMINORI TOMITA
NATIONALITY: JAPAN
BORN IN: 1969
DIED IN:

[ABSTRACT]

[OBJECT]

TO PROVIDE A TECHNOLOGY WHICH IS CAPABLE OF PREVENTING UNFAIR
USE OF DIGITAL CONTENTS

[SOLVING MEANS]

A DIGITAL CONTENTS UNFAIR USE PREVENTING METHOD WHICH PREVENTS
UNFAIR USE OF DIGITAL CONTENTS COMPRISING THE STEPS OF:
PRESETTING INFORMATION ON THE STATE TO CONTROL THE PLAYBACK
PROCESSING OF THE DIGITAL CONTENTS IN INTEREST; AND
DEPENDING UPON THE VALUE OF SAID PRESET STATE INFORMATION,
CONTROLLING THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS
IN INTEREST

101

T06220" 46504660

FIG.9

dsign2.xml

901

```

001 <document>
002   <Signature>
003     <SignedInfo>
004       <SignatureMethod Algorithm="http:// . . ."/>
005       <Reference IDREF="http://home/dsign.html#author">
006         <DigestMethod Algorithm="http:// . . ."/>
007         <DigestValue Encoding=" . . . ">
008           bY3JsOGl6Nd6ddsafT9FAn++2uK9gBFt4ge4=
009         </DigestValue>
010       </Reference>
011     </SignedInfo>
012     <SignatureValue>
013       4eXIQCDRKxFr/bY3JsOGl6Nd6afT9FAn++2uK9yWegTsmM6aiAqmb0Eiybf50q7d
014     </SignatureValue>
015     <KeyInfo>
016       <X509Date>
017       <X509Name> CN=Taminori Tomita, C=JP </X509Name>
018       <X509Certificate>
019         tLKvkqZQ2ce+6slaulJ6slaulJ8cw7yALDZJhzfFihHzALBgcqhkwLAIUZUJD>
020       </X509Certificate>
021     </X509Date>
022   </keyInfo>
023 </Signature>
024   <Signature>
025     <SignedInfo>
026       <SignatureMethod Algorithm="http:// . . ."/>
027       <Reference IDREF="http://home/dsign.html#title">
028         <DigestMethod Algorithm="http:// . . ."/>
029         <DigestValue Encoding=" . . . ">
030           hkjOOAQDBQADLwAwLAIUZUJD++2uK9gBFt4ge4=
031         </DigestValue>
032       </Reference>
033     </SignedInfo>
034     <SignatureValue>
035       6slaulJ8cw7yALDZJhzfFihHzALBgcqhkJOOAQDBQADLwAwLAIUZUJDAqmb0Eiybf50q7d
036     </SignatureValue>
037     <KeyInfo>
038       <X509Date>
039       <X509Name> CN=Taro Yamada, O=Hitachi syuppan, C=JP </X509Name>
040       <X509Certificate>
041         Ydoys2usleZ9p6xRwEZYnoCFC97/v+w6FlyM+KgDDAgK9LYxN/n
042       </X509Certificate>
043     </X509Date>
044   </keyInfo>
045 </Signature>
048 </document>

```

902

903

904

T06230"46504650

FIG.10

#	DIGITAL SIGNATURE FILENAME	SIGNATORY INFORMATION	DIGITAL SIGNATURE OBJECT DATA FILENAME	SIGNATURE OBJECT DATA IDENTIFIER	SIGNATURE VERIFICATION RESULT
1	dsign2.xml	CN=Taminori Tomita, C=JP	dsign.html	http://home /dsign.html#auther	OK
2	dsign2.xml	CN=Taro Yamada, O=Hitachi syuppann, C=JP	dsign.html	http://home /dsign.html#title	OK

1001

1002

FIG.11

AUTHOR: TAMINORI TOMITA NATIONALITY: JAPAN BORN IN: 1969 DIED IN:		1101
SIGNATORY INFORMATION: CN=Taminori Tomita, C=JP VERIFICATION RESULT: OK		1102
[ABSTRACT]		
[OBJECT] TO PROVIDE A TECHNOLOGY WHICH IS CAPABLE OF PREVENTING UNFAIR USE OF DIGITAL CONTENTS		
[SOLVING MEANS] A DIGITAL CONTENTS UNFAIR USE PREVENTING METHOD WHICH PREVENTS UNFAIR USE OF DIGITAL CONTENTS COMPRISING THE STEPS OF: PRESETTING INFORMATION ON THE STATE TO CONTROL THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS IN INTEREST; AND DEPENDING UPON THE VALUE OF SAID PRESET STATE INFORMATION, CONTROLLING THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS IN INTEREST		
SIGNATORY INFORMATION: CN=Taro Yamada, O=Hitachi syuppann, C=JP VERIFICATION RESULT: OK		1104

200004504650

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FIG.12

design3.xml

1201

```
001 <document>
002   <Signature>
003     <SignedInfo>
004       <SignatureMethod Algorithm="http:// . . ."/>
005       <Reference IDREF="ALL">
006         . . .
007       </Reference>
008     </SignedInfo>
009     <SignatureValue>
010       MCwCFB0M62xmMGm7qfBt8R+6slaulJ8cw7yALDZJhzfFIOg07srWhaiA==
011     </SignatureValue>
012     <KeyInfo>
013       <X509Date>
014       <X509Name> CN=Taro Yamada, O=Hitachi syuppan, C=JP </X509Name>
015       . . .
016     </X509Date>
017   </keyInfo>
018 </Signature>
```

1202

```
019 </Object ID="ALL">
020   <Signature>
021     <SignedInfo>
022       <SignatureMethod Algorithm="http:// . . ."/>
023       <Reference IDREF="title">
024         . . .
025       </Reference>
026     </SignedInfo>
027     <SignatureValue>
028       MCwCFB0M62xmMGm7qfBt8R+Zv4YulAhRvQHQIOYOg0
029     </SignatureValue>
030     <KeyInfo>
031       <X509Date>
032       <X509Name> CN=Taminori Tomita, C=JP </X509Name>
033       . . .
034     </X509Date>
035   </keyInfo>
036 </Signature>
```

1203

1204

```
037 </Object ID="title">
038   <title>[ABSTRACT] </title>
039   <lines>
040     <line>[OBJECT]
041     <line>TO PROVIDE A TECHNOLOGY WHICH IS CAPABLE OF PREVENTING UNFAIR
042       USE OF DIGITAL CONTENTS </line>
043     <line>[SOLVING MEANS] </line>
044     <line>A DIGITAL CONTENTS UNFAIR USE PREVENTING METHOD WHICH PREVENTS
045       UNFAIR USE OF DIGITAL CONTENTS COMPRISING THE STEPS OF: </line>
046     <line>PRESETTING INFORMATION ON THE STATE TO CONTROL THE PLAYBACK
047       PROCESSING OF THE DIGITAL CONTENTS IN INTEREST; AND </line>
048     <line>DEPENDING UPON THE VALUE OF SAID PRESET STATE INFORMATION, </line>
049     <line>CONTROLLING THE PLAYBACK PROCESSING OF THE DIGITAL CONTENTS IN
050       INTEREST </line>
051   </lines>
052 </Object>
053 </Object>
054 </document>
```

FIG.13

#	DIGITAL SIGNATURE FILENAME	SIGNATORY INFORMATION	DIGITAL SIGNATURE OBJECT DATA FILENAME	SIGNATURE OBJECT DATA IDENTIFIER	SIGNATURE VERIFICATION RESULT
1	dsign3.xml	CN=Taro Yamada, O=Hitachi syuppann, C=JP	dsign3.html	ALL	OK
2	dsign3.xml	CN=Taminori Tomita, C=JP	dsign3.html	title	OK

1301

1302

FIG.14

The diagram illustrates a digital content protection system architecture. It is divided into three main horizontal sections, each with a reference numeral on the right:

- 1401 (Top Section):** Contains the [ABSTRACT] and [OBJECT] fields. The [OBJECT] field describes a technology capable of preventing unfair use of digital contents.
- 1403 (Middle Section):** Contains the [SOLVING MEANS] field, which describes a digital contents unfair use preventing method. This method includes presetting information on the state to control playback processing and controlling the playback processing based on the preset state information.
- 1404 (Bottom Section):** Contains a box for SIGNATORY INFORMATION: CN=Taminori Tomita, C=JP and VERIFICATION RESULT: OK.

Below these sections, a separate box (1402) contains the SIGNATORY INFORMATION: CN=Taro Yamada, O=Hitachi syuppann, C=JP and VERIFICATION RESULT: OK.